Iowa's Redevelopment Tax Credit

Tax Credits Program Evaluation Study

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Preface

During the 2005 Legislative Session the Iowa Department of Revenue received an appropriation to establish the Tax Credits Tracking and Analysis Program to track tax credit awards and claims. In addition, the Department was directed to assist the legislature by performing periodic economic studies of tax credit programs. This is the first economic study completed for the Redevelopment Tax Credit.

As part of the evaluation, an advisory panel was convened to provide input and advice on the study's scope and analysis. We wish to thank the members of the panel:

Lucas Beenken	Iowa State Association of Counties
Susan Chambers	Iowa Department of Revenue
Liesl Eathington	Iowa State University
Peter Fisher, PhD	Iowa Policy Project
Kristin Hanks	Iowa Economic Development Authority
Carrie Johnson	Iowa Department of Management
Erin Mullenix	Iowa League of Cities
Ted Nellessen	Iowa Department of Management
Matt Rasmussen	Iowa Economic Development Authority
Jeff Robinson	Legislative Services Agency (Iowa)
Julie Roisen	Iowa Department of Revenue
Scott Sanders	City of Des Moines

The assistance of an advisory panel implies no responsibility for the content and conclusions of the evaluation study.

This study and other evaluations of Iowa tax credits can be found on the Tax Credits Tracking and Analysis Program Web page on the Iowa Department of Revenue website.

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Executive Summary

The Iowa Redevelopment Tax Credit was enacted in tax year 2008. The tax credit is awarded to non-governmental entities for investing in redeveloping a brownfield or grayfield site located in Iowa. The tax credit equals 12 percent of the qualified redevelopment expenses for grayfield projects and 24 percent for brownfield projects. If a project meets green development standards, the tax credit equals 15 percent of the qualified expenses for a grayfield project and 30 percent for a brownfield project. The Redevelopment Tax Credit for any one project is limited to 10 percent of the total annual credit cap. The tax credit, which is awarded by the Iowa Economic Development Authority, is nonrefundable, but transferable. In fiscal year 2014, the annual tax credit cap was raised to $10 million from $5 million in fiscal years 2012 and 2013 and $1 million in fiscal year 2010. The tax credit is set to be repealed June 30, 2021.

The major findings of the study are these:

Federal and Other States' Brownfield Tax Credit Programs

- The Federal Brownfield Tax Program was an enhanced tax deduction for investment in redeveloping brownfield properties created in 1997. The tax deduction expired at the end of 2011.

- Nine states have established tax credit programs dedicated to the cleanup and redevelopment of brownfield, or polluted, properties: Florida, Iowa, Louisiana, Massachusetts, Missouri, Mississippi, New York, South Carolina, and Tennessee.

- New York offers a refundable tax credit, while the remaining states' credits are nonrefundable. Four states, Iowa, Florida, Louisiana, and Mississippi, offer transferable credits.

- Iowa is the only state to offer tax credits for grayfield properties.

- Among Iowa's neighboring states, only Missouri offers a similar brownfield tax credit program and has a top rate of 100 percent, the highest among all nine states. Missouri is the only state that has a job-creation requirement for applicants.

Redevelopment Tax Credit Awards

- Between FY 2010 and FY 2013, there was $11.0 million of Redevelopment Tax Credits reserved for 49 projects. Redevelopment work must be completed within 30 months after receiving a reservation, although it is possible to receive a 12 month extension. By the end of FY 2013, 12 projects have been completed and received final Redevelopment Tax Credit awards totaling $2.0 million.

- Three brownfield projects received tax credit awards totaling $0.3 million. Nine grayfield projects received tax credit awards totaling $1.7 million. Of these 12 projects, six received awards equal to the applicable maximum project cap based on the year of reservation.

- Between FY 2010 and FY 2013, $1.7 million of tax credits have been transferred, accounting for 88 percent of all tax credit awards.

Redevelopment Tax Credit Claims

- Only tax credits awarded from FY 2010 reservations have been claimed through October 2013. Tax credits are awarded only for investments made after the Redevelopment Tax Credit is reserved, which can result in a significant lag between the date of the tax credit reservation and when the tax credit can be claimed. There were 24 claims made through October 2013, totaling $0.5 million.

- There were 11 claims made from brownfield projects totaling $0.3 million, and 13 claims made from grayfield projects totaling $0.2 million.

- There were 20 claims against Iowa individual income tax liability, totaling $0.2 million, and four claims against franchise tax and insurance premium tax, totaling $0.3 million.

Economic Impacts of the Redevelopment Tax Credits

- The total assessed property values for properties in the 12 completed projects increased by more than 300 percent after the project completion.

- For the six projects with business activity reported after the project completion, the number of jobs reported by businesses at those properties increased by 139 percent and the total wages increased by 119 percent.

- Comparing three Redevelopment project properties located in the city of Woodbine and the 21 neighboring properties, the growth rate of property values of the Redevelopment project properties between 2009 and 2013 was more than 400 percent. The growth rate of property values of the neighboring properties between 2009 and 2013 was 15 percent.

I. Introduction

The Redevelopment Tax Credit was created to encourage investment in brownfield or grayfield properties. These investments in redevelopment can promote general economic health in communities by eliminating environmental hazards and cleaning up neighborhood eyesores. The Iowa Economic Development Authority administers the tax credit through the Brownfield/Grayfield Tax Credit Program.

The Section II describes the program. The federal brownfield program and brownfield tax credit programs from other states are introduced in the Section III. Research on the environmental impact of brownfield projects are summarized in Section IV. Section V provides descriptive statistics of tax credit awards, transfers, and claims. Economic activities at the project properties and neighboring properties are discussed in Section VI. The final section concludes.

II. Description of the Redevelopment Tax Credit

The Brownfield/Grayfield Tax Credit Program was first available on July 1, 2009. The program awards tax credits to individuals and corporations for investing in redeveloping a brownfield or grayfield site located in Iowa.

A brownfield site is defined as an abandoned, idled, or underutilized industrial or commercial facility where expansion or redevelopment is complicated by real or perceived environmental contamination. Examples of brownfield sites include former gas stations, dry cleaners, and other commercial operations that may have utilized products or materials potentially hazardous to the environment.

A grayfield site is defined as a property that has been developed and has infrastructure in place but the property's current use is outdated (at least 25 years old) and one or more of the following conditions exists: (1) 30 percent or more of a building located on the property that is available for occupancy has been vacant or unoccupied for a period of 12 months or more; (2) the assessed value of the improvements on the property has decreased by 25 percent or more; (3) the property is currently being used as a parking lot; or (4) the improvements on the property no longer exist.

If the redevelopment does not meet green development standards, the amount of the Redevelopment Tax Credit equals one of the following:[1]

[1] Green development standards means that projects must receive certification at the Gold level in the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed and administered by the U.S. Green Building Council, or certification at the Silver level in the LEED Green Building Rating System, with demonstration to the satisfaction of the Building Code Commissioner that a good faith effort was made to obtain Gold level certification and that the project emphasizes energy conservation, or any alternative demonstrated to be equivalent to the satisfaction of the Building Code Commissioner (661 Iowa Administrative Code Chapter 310).

- 12 percent of the investment in a grayfield site; or
- 24 percent of the investment in a brownfield site.

If the redevelopment meets green development standards, the amount of the Redevelopment Tax Credit equals one of the following:

- 15 percent of the investment in a grayfield site; or
- 30 percent of the investment in a brownfield site.

In fiscal year 2010, the tax credit cap for this program was $1 million. No more than ten percent of credits ($100,000) could be awarded to a single project. Due to budgetary constraints the tax credit program was not extended beyond its initial year, but in fiscal year 2012 the program was re-enacted. In fiscal year 2012, the tax credit cap was raised to $5 million and the maximum award amount for a single project rose to $500,000, or 10 percent of the annual program cap. In 2013, the Legislature raised the tax credit cap to $10 million for fiscal year 2013 and subsequent fiscal years. The maximum amount of the credit that can be awarded to a single project remains ten percent of the tax credit cap, but rose with the cap to $1 million. The tax credit is nonrefundable, but unused credits can be carried forward for up to five years. The tax credit is also transferable. The tax credit is set to be repealed on June 30, 2021.

To apply for the tax credit, an investor in a project, which cannot be a city or a county, must submit an application to the Iowa Economic Development Authority (EDA). The Brownfield Advisory Council reviews the application and determines the potential amount of the tax credit award based on the estimated investment in qualified expenses. The Brownfield Advisory Council consists of five members, with EDA, the Iowa Department of Transportation, the Iowa Department of Natural Resources, the Iowa League of Cities, and the EDA Board each with one representative. The EDA Board receives the recommendation from the Brownfield Advisory Council and makes the final approval.

The project may already be underway at the time of application, but only costs incurred and paid for after the project receives approval from the EDA Board qualify for the tax credit. If the redevelopment project receives other federal, State, and local subsidies, such as the Iowa Historic Preservation and Cultural and Entertainment District Tax Credit, grants, or forgivable loans, those public subsidies are excluded from the determination of the qualified expenses to calculate the Redevelopment Tax Credit award amount.

Upon approval of the application, EDA registers the project and allocates the preliminary tax credit award amount under the annual program budget for the fiscal year when the project is registered. The Authority can reserve tax credits up to the annual award cap amount each fiscal year. EDA allocates the Redevelopment Tax Credits on a first-come, first-served basis. When the total award amount reaches the annual cap, the advisory council stops the review process and any unapproved projects are put in the queue for the following fiscal year.

In fiscal year 2014, the full $10 million was allocated within the first three months of the year, revealing the growing interest for investment in these types of projects. EDA is currently considering a change in the allocation process to take into consideration the economic benefits of each project when allocating the limited funds available under the program.

After the project is approved, EDA issues a letter notifying the investor of the successful registration and the preliminary amount of the tax credit award which has been reserved for the project. A registered project must be completed within 30 months of the project's approval unless EDA provides additional time (not to exceed 12 months) to complete the project. For example, a project registered by the end of fiscal year 2010 had to be completed by December 31, 2012 in order to receive the award if EDA did not grant an extension. After completion of the project and the submission of a project audit that was performed by an independent certified public accountant licensed in the state of Iowa, the final amount of the tax credit award is determined and the tax credit certificate is issued to the investor. The final tax credit award cannot exceed the preliminary tax credit reservation amount.

Because the project must be completed before the award can be claimed, there is often a significant lag between the registration and the issued award. There is also a lag between when the tax credit certificate is issued and the claim of the tax credit against tax liability. The tax credits can be claimed against individual and corporate income taxes, franchise taxes, insurance premium taxes, and money and credits taxes (owed by credit unions operating in Iowa).

III. Federal and Other States' Brownfield Tax Credit Programs

The Federal Brownfields Tax Incentive was created by the Tax Relief Act of 1997. The incentive became temporarily inactive after its initial expiration date of December 31, 2005. On December 20, 2006, the incentive was reenacted retroactively to January 1, 2006 and extended through December 31, 2007. The tax incentive again became temporarily inactive after its expiration on December 31, 2007; however, on October 3, 2008, the incentive was again reenacted retroactively and extended through December 31, 2011. On December 31, 2011, the Federal Brownfields Tax Incentive expired for the third time and as of the publication of this study has not been reenacted.

The federal incentive was not a tax credit, but rather an enhanced deduction. Federal tax law generally requires that the cost of property improvements must be deducted over a period of years. The Federal Brownfields Tax Incentive allowed a taxpayer to fully deduct the costs of an environmental cleanup in the year the costs were incurred rather than spreading them over a period of years. The value of the federal incentive depended on the marginal tax rate of the taxpayer and the time value of money for the taxpayer.

Nine states (Florida, Iowa, Louisiana, Massachusetts, Missouri, Mississippi, New York, South Carolina, and Tennessee) have established tax credit programs dedicated to the cleanup and the redevelopment of brownfield or polluted properties (see Table 1). All programs were enacted after the Federal Brownfields Tax Incentive was created. Florida and Massachusetts created their programs in the late 1990s. The other seven states established their brownfield tax credit programs after 2000.

Missouri's brownfield tax credit program provides a tax credit offsetting 100 percent of the cost of remediating the project property, which is the highest among all nine states. The tax credit programs in Florida, South Carolina, and Tennessee provide a 50 percent tax credit for most eligible projects. Florida's program provides an additional 25 percent tax credit if the use of the finished project site is affordable housing or healthcare. Both South Carolina and Mississippi allow a single project to receive multiple awards over the project period.

South Carolina's program awards tax credits offsetting an additional 10 percent of costs incurred in the year when the project is completed. Tennessee's program allows an additional 25 percent tax credit for applicants investing at least $200 million in eligible projects. The top tax credit rate for programs in Massachusetts and New York is 50 percent. The top credit rate for Louisiana's program is 25 percent. Mississippi's program issues tax credits offsetting 25 percent of the remediation costs. Iowa's Redevelopment Tax Credit offers a top rate of 30 percent for brownfield redevelopment, but the lower rate of 12 percent for a grayfield redevelopment project is the lowest among the nine states, although no other state offers any amount of tax credit for grayfield site redevelopment.

Iowa, Louisiana, Massachusetts, and New York award more tax credits to projects if additional higher redevelopment standards are met. Louisiana awards a 15 percent tax credit to subsidize costs for simply investigating the environmental pollution at the project site. If the project removes contaminants, Louisiana's program will award a 25 percent tax credit. Both Massachusetts and New York provide tax credits offsetting 50 percent of costs if the project site can be used for any purpose without restriction after the cleanup. If the use of a cleanup property is limited to certain purposes, such as residential, commercial, or industrial, Massachusetts provides a 25 percent tax credit. New York's program provides a tax credit ranging from 22 percent to 40 percent depending on the use of the site if there is still limitation on uses. In Iowa, if the project meets green development standards, the tax credit rate rises to 30 percent for a brownfield project and 15 percent for a grayfield project, compared to the basic 24 percent for a brownfield project and 12 percent for a grayfield project.

Florida, Iowa, Mississippi, and South Carolina have set a maximum amount of tax credits that any project can receive. Mississippi's program only allows a project to receive a tax credit up to $40,000 in a year and $150,000 overall. In South Carolina, the amount of tax credits that an eligible brownfield project can receive cannot exceed $50,000 in a year, but there is no limit on total credits received by a multi-year project.

Florida's program allows an eligible project to receive up to $500,000 of tax credits and the annual limit for all credits awarded by the program is $5 million. The maximum amount of tax credit award received by a single project in Iowa is 10 percent of the annual tax credit cap for the Redevelopment Tax Credit. For fiscal years 2013 and later, the annual tax credit cap is $10 million, resulting in a $1 million project limit.

New York offers the only refundable tax credit, which allows credits that cannot be applied against taxes owed to be refunded to the taxpayer. The eight other state programs offer nonrefundable tax credits. Mississippi allows the tax credit to be carried forward for an unspecified number of years. Tax credit recipients in Florida, Iowa, Massachusetts, and South Carolina can carry their unused tax credits forward for five years. Louisiana's program allows a 10-year carry forward period and Tennessee has a 15-year carry forward period. Missouri's program has a carry forward period of 20 years. Florida, Iowa, Louisiana, Massachusetts, and Missouri's programs allow the tax credit to be transferred, which means taxpayers can sell the credits to other taxpayers. Those sales are often made at a discount.

Missouri is the only neighboring state of Iowa with a brownfield tax credit program. Along with offering the highest credit rate of 100 percent, Missouri is also the only state that has a job-creation requirement for applicants. Missouri's program requires applicants to create at least ten new jobs or retain at least 25 existing jobs to be eligible for the tax credit. Total Missouri Brownfield Redevelopment Program awards grew from $15.6 million in 2003 to $20.4 million in 2008 and total claims grew from $5.7 million in 2003 to $26.5 million in 2008 (Missouri Growth Association, 2009).

IV. Literature Review on Brownfield Project Impacts on the Environment

Several studies have evaluated the environmental impacts of brownfield programs that received public subsidies including tax credits in the United States. Evidence that the redevelopment of brownfield properties can save greenfield (or undeveloped) space, reduce greenhouse gas emissions, and improve water quality were reported.

George Washington University (2001) studied the construction and zoning codes in six cities (St. Louis, Missouri; Lowell, Massachusetts; Burlington, Vermont; Baltimore, Maryland; Richmond, Virginia; and Sacramento, California). Renovating an existing building located in a brownfield site was found to use less land than developing a new greenfield project. The researchers found that an estimated average of 4.5 acres of greenfield would be needed to provide the same building space for commercial purposes as could be made available through redeveloping one acre of a brownfield project. De Sousa (2006) surveyed the brownfield projects for residential use in Chicago and Milwaukee. The author found that the number of housing units per acre provided by the brownfield project was higher than that provided by the greenfield project because brownfield projects were concentrated in high density areas in the cities.

Brownfield projects were also estimated to generate lower air pollution emissions, such as nitrogen oxides (NOX) and volatile organic compounds (VOC), than those generated by greenfield projects. The U.S. Conference of Mayors (2001) surveyed Baltimore and Dallas to compare NOX and VOC emissions. In Baltimore, VOC emissions from brownfield projects were on average 36 percent lower than those from greenfield projects and NOX emissions from brownfield projects were 40 percent lower. In Dallas, VOC emissions from brownfield projects were, on average, 73 percent lower than those from greenfield projects and NOX emissions from brownfield projects were 87 percent lower.

Evidence was also found that brownfield projects benefit water quality. The U.S. Environmental Protection Agency (2006) noted that brownfield projects were usually associated with high density development. For example, for residential redevelopment, the EPA estimated that for a high density development with eight houses per acre, water runoff rates per house decreased by about 74 percent compared to areas with one house per acre. Thus, the authors concluded that a brownfield redevelopment project is likely to reduce the water runoff rate in the project area.

V. Redevelopment Tax Credit Descriptive Statistics

A. Redevelopment Tax Credit Awards

In fiscal year 2010, the Iowa Economic Development Authority registered 12 projects with total projected qualified expenses of $39 million (see Table 2). After a year with no program funding, there were 21 projects registered in fiscal year 2012 with total projected qualified expenses of $101 million, 16 projects registered in fiscal year 2013 with total projected qualified expenses of $62 million, and 19 projects registered in fiscal year 2014 with total projected qualified expenses of $120 million. EDA reserves tax credits based on the qualified expenses for each fiscal year and the applicable tax credit rate based on the project type. Close to $1 million of tax credits were reserved in fiscal year 2010, $5 million were reserved for both fiscal year 2012 and 2013, and $10 million of tax credits were reserved in fiscal year 2014. Reserved tax credits averaged just seven percent of estimated qualified expenses over the four years of reservations because 30 projects were subject to the project award cap. For uncapped registered projects, the average tax credit rate was 15 percent in fiscal year 2010, 18 percent in fiscal year 2012, 17 percent in fiscal year 2013, and 6 percent in fiscal year 2014. The relatively low average tax credit rate for uncapped registered projects in fiscal year 2014 reflects that several large projects that were last in line for awards, under the first-come, first-served awarding process, received awards from the limited funds left under the cap.

After the redevelopment projects are completed, actual qualified redevelopment expenses are reported to EDA. Those expenses are used to calculate the final tax credit award. Through October 2013, 12 projects received final Redevelopment Tax Credits awards based on reservations for fiscal years 2010, 2012, and 2013 (see Table 3).

Nearly $2.0 million was awarded to these projects as a result of $28 million in investment. The final awards were seven percent of qualified expenses with six projects subject to the project award cap including four fiscal year 2010 awards, one fiscal year 2012 awards, and the one fiscal year 2013 project. The average award amount was $164,549. Recall, no awards were reserved in fiscal year 2011 because the program was not in effect that year. Five projects reserved during fiscal year 2010 have not been completed, and since no extensions were granted, they are no longer eligible for awards. The amount of tax credits reserved but not awarded is $0.4 million.

Among the 12 projects with tax credits awarded, nine were grayfield projects and three were brownfield projects (see Table 4). The total amount of awards for brownfield projects was $0.3 million and the average award was $94,345. The total amount of awards for grayfield projects was $1.7 million and the average award was $187,950. Two brownfield projects and four grayfield projects were capped. None of the projects received the higher credit rate as a result of meeting the green development standards. Although some of the investors had indicated they would attempt to meet the standards, the projects had high enough redevelopment costs that the final award equaled the preliminary award even at the lower credit rate. Therefore there was no incentive for the projects to incur the costs of green development standards certification.

Through October 2013, awarded brownfield or grayfield projects were located in the following seven counties: Cedar, Dubuque, Harrison, Linn, Polk, Scott, and Webster (see Figure 1). Linn County had two awards with the highest total award amount of $1.0 million. Harrison County had three awards, a higher count than any other county, but the tax credit awards totaled only $0.16 million. The smallest award was received by a project in Webster County. The three brownfield projects were located in Dubuque, Polk, and Cedar counties.

Tax credit award recipients can transfer their nonrefundable Redevelopment Tax Credits to other taxpayers if the awardee does not have Iowa tax liability to offset with the tax credit or desires to receive cash for the credit prior to the time when the credit can be claimed on a tax return. These transfers are administered by the Iowa Department of Revenue (IDR). Through October 2013, there have been 12 transfers by shareholders in eight awarded projects. In many cases projects are completed by pass-through entities such that one award is distributed among the shareholders of the entity. In that case, each shareholder is eligible to claim or transfer his share of the tax credit.

Tax credits awarded in fiscal year 2010 were sold in seven transfers; tax credits awarded in fiscal year 2012 were sold in four transfers; and tax credits awarded in fiscal year 2013 were sold in one transfer (see Table 5). Tax credits under one contract have been sold twice, accounting for two of those ten transfers; there is no limit on the number of times one credit can be transferred. The amount of transferred tax credits from fiscal year 2010 awards was $0.3 million, 57 percent of total final awards and 33 percent of total reserved tax credits for fiscal year 2010 projects; however, with the time limit on project completion the remaining fiscal year 2010 reserved tax credits cannot be issued. The amount of transferred tax credits from fiscal year 2012 awards was $0.9 million, 99 percent of total final awards and 18 percent of total reserved tax credits for fiscal year 2012 projects. The amount of transferred tax credits from fiscal year 2013 awards was $0.5 million, 100 percent of total final awards and 10 percent of total reserved tax credits for fiscal year 2013 projects. The total amount of tax credits transferred was $1.7 million, 88 percent of total final awards issued and 16 percent of total reserved tax credits for projects from 2010 to 2013.

B. Redevelopment Tax Credit Claims

There were four Redevelopment Tax Credit claims in tax year 2010, sixteen claims in tax year 2011, and four claims filed in tax year 2012 (see Table 6). Taxpayers can claim the tax credit in any tax year beginning on or after the fiscal year that the project was registered and the tax credit was reserved. Multiple claims can be made against one project award in a tax year if the investing entity is a pass-through entity. In addition, if a taxpayer carries forward unused credit, the taxpayer can make multiple claims across tax years. Through October 2013, all tax credits claimed were from awards issued in fiscal year 2010. The total amount of claimed credits was close to $0.5 million for these three years. The average claim applied against tax liability was $20,067. As of October 2013, tax credits carried forward to tax year 2013 totaled $63,287, accounting for seven percent of total awards in fiscal year 2010.

For tax years 2010 through 2012, taxpayers with brownfield projects made 11 claims for a total of $269,031 with an average claim of $24,457 (see Table 7). Taxpayers with grayfield projects made 13 claims, totaling $212,580 with an average claim of $16,352.

Through October 2013, there were 20 Redevelopment Tax Credit claims against claimants' individual income tax liabilities, totaling $181,611 (see Table 8). There were also four claims against franchise tax and insurance premium tax, totaling $300,000. These claims were made by taxpayers that purchased tax credits from the original tax credit award recipients.

VI. Economic Analysis of Redevelopment Tax Credit Projects

A. Project Property Valuation

Redevelopment projects receiving tax credit awards transform contaminated or abandoned properties into properties that can be used for industrial, residential, or commercial purposes. Such transformations should improve the property value and encourage increased economic activity such as business investment and employment at project properties. Differences in assessed property values before and after the redevelopment were calculated to examine if these expectations were met. The assessed property value used is the sum of the assessed land value, the assessed building value, and other assessed improvements including any work on the property (such as planting trees) which increases its value.

Assessed property values of all 12 properties receiving final tax credit awards as of October 2013 were collected based on street addresses using city and county assessors' websites. Assessed property values in 2009 for those projects receiving awards for fiscal year 2010 and assessed property values in 2011 for those receiving awards for fiscal year 2012 were used as property values before the completion of the redevelopment projects. Assessed property values in 2013 were used to measure property values after the project completion.

Comparing property values before and after the redevelopment shows that all 12 properties experienced an increase in property value. The total assessed property value for all 12 projects was approximately $4.8 million before the redevelopment (see Table 9). After the completion of the projects, the total assessed property value was $20.0 million, a 315.0 percent increase ($15.2 million). The average assessed property value was about $0.4 million before the project completion and increased to $1.8 million after completion. The median assessed property value increased by over 800 percent from $67,505 before the project completion to $0.6 million after redevelopment.

For the three brownfield properties, the average assessed property value increased 31.3 percent from less than $0.5 million before to $0.6 million after project completion. The growth rate of the median assessed property value was 185.5 percent from $0.3 million before to nearly $0.9 million after completion. For the nine grayfield properties, the average assessed property value increased over 1,000 percent from $0.3 million before to $3.8 million after project completion. The growth rate of the median assessed property value was over 500 percent from $50,000 before to $0.3 million after completion.

The increase of $15.2 million in the total assessed property values was higher than the $14.0 million in total qualified expenses for the completed projects. The increase in the brownfield project property values was $1.2 million, lower than the $1.7 million in total qualified expenses for the brownfield projects. In contrast, the increase in the grayfield project property values was $14.0 million, higher than the $12.3 million in total qualified expenses. If the benefit of the project for investors is defined as the increase in property value and the cost is defined as the qualified expenses, based on the existing completed projects, grayfield projects were more profitable than brownfield projects. That result helps explain the fact that only a small number of projects were brownfield projects even when brownfield projects provide a higher tax credit rate.
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Among the 12 properties receiving the Redevelopment Tax Credit award, six properties also received a Historic Preservation and Cultural and Entertainment District (HPCED) Tax Credit award from the State of Iowa. These projects received nearly $0.8 million in Redevelopment Tax Credits and $2.5 million in HPCED Tax Credits for a total of $3.3 million in State funding for the six projects. The total qualified expenses for the Redevelopment Tax Credit were $6.4 million for these six projects which does not include any funding covered by the HPCED Tax Credits as those expenses are not considered qualified. The total property value of the six properties receiving both tax

credit awards grew by 75.3 percent from $4.1 million before the project to $7.3 million after completion (see Table 10). The median property value of the six properties receiving both tax credits rose from over $0.1 million before the project to $0.6 million after completion.

B. Project Measures of Economic Activity

The investment made in a project receiving the Redevelopment Tax Credit should not only improve the property value, but should also help promote economic activity for commercial or industrial properties. The number of jobs reported at the project property and the total wages for those jobs before the redevelopment projects were compared with the same measures after completion.

Employment and wage data were collected from unemployment insurance data provided by Iowa Workforce Development (IWD), which includes the number of employees, the total wages, and the unemployment insurance contribution made by the employer at every business address. Employment and wage data in calendar year 2010 were used as indicators of economic activity at the properties before the redevelopment project and values in 2012 were used as indicators of economic activity after the redevelopment project. A property is defined as 'vacant' if no employment and wage information at the property address were identified in 2010 or 2012. In 2010, nine of the total 12 properties were vacant. Four previously vacant properties were occupied and five remained vacant in 2012. While one property was occupied by a business before the project in 2010, there was no data for this property address in 2012.

For those six properties which were not vacant in 2012, the total number of jobs reported in 2010 was 49 (see Table 11). In 2012, the total number of jobs reported at the six properties was 117, a 138.8 percent increase from 2010. The total wages paid to employees at those properties were $2.3 million in 2010 and close to $5.0 million in 2012, a 119.0 percent increase. However, the average wage in 2012 was $42,499, about 8.3 percent lower than 2010 wages ($46,336).

Among the six properties, four were retail properties in 2012 based on the property use descriptions available on the assessors' websites. The four retail properties were all vacant in 2010. The other two properties include an office and apartment property. For non-retail businesses, the number of jobs reported rose from 49 in 2010 to 55 in 2012, a 12.2 percent increase. The total wages paid to employees in those jobs increased by 10.0 percent from $2.3 million in 2010 to $2.5 million in 2012. The average wage dropped by 2.0 percent, from $46,336 in 2010 to $45,430 in 2012.

There was no employment in retail businesses at those properties before the redevelopment project and 62 jobs were created after the project completion. The total wages of those created retail jobs were $2.5 million and the average wage in 2012 was $39,900.

C. Comparison of Project Property Valuation and Neighboring Properties

Comparing property values and economic activity at the project properties with those at the neighboring properties can be used to examine two types of economic impacts that the redevelopment projects may have in the local communities. The first potential impact is the redevelopment impact: the project property should have higher growth rates for property values and economic activity than those of neighboring properties after the redevelopment project investment to address perceived contamination or outdated infrastructure. The second possible impact is the spillover impact: the investment in the project property improves the business environment and attracts more traffic flow in the neighborhood, which brings more business opportunities to other businesses in the neighborhood and generates a higher growth rate for the whole community. This section only focuses on the first potential impact because the investment of the awarded redevelopment project tends to be small and the spillover impact is expected to be insignificant.

Of the 12 redevelopment projects completed, three were in Woodbine and located in the same downtown area. Therefore, projects in the city of Woodbine were used for the neighboring property analysis. There are 21 properties surrounding the three project properties in the one-block radius. The total assessed property values of neighboring properties was $1.4 million before the project and $1.6 million after completion, a 15.2 percent increase (see Table 12). The total assessed value of the three project properties in Woodbine was $58,969 before the project and $1.6 million after completion, a more than 400 percent increase and much higher than the growth rate of the neighboring property values. The median assessed value of neighboring properties was $44,298 before the project and $42,470 after completion, a 4.1 percent decrease. The median assessed value of the three project properties was $18,038 before the project and $0.1 million after completion, a more than 400 percent increase.

VII. Conclusion

This evaluation study adds to the understanding of the Iowa Redevelopment Tax Credit, also known as the Brownfield/Grayfield Tax Credit Program, as it gains popularity as an economic development tool, which is demonstrated by the recent increase in the annual award cap for this program to $10 million per year. While this evaluation study provides detailed information on the usage of this program, it is subject to important limitations. As a relatively new program with a 30-month lag to complete a project, there are only 12 projects that have been finalized and awarded tax credits as of October 2013.

This analysis assessed the economic impact of the limited data on the Redevelopment Tax Credit. Specifically, it examined property value growth, employment growth, and wage growth at properties after the project completion. Based on the statistical analyses described above, this evaluation study found properties generally experienced significant growth in property values as well as employment and wage growth after project completion. A more rigorous statistical study cannot be conducted with the limited data available.

The existence of important limitations makes clear that further study is necessary. Nevertheless, it is hoped that this evaluation study provides a positive contribution to the understanding of the Redevelopment Tax Credit program and its relationship to economic growth in Iowa.

References

De Sousa, Christopher, "Residential Development Activity on Urban Brownfields In Milwaukee and Chicago: An Examination of Redevelopment Trends, Developer Perceptions, and Future Prospects," September 2006, http://www4.uwm.edu/ced/publications/desousa_906.pdf accessed in November 2013.

George Washington University, "Public Policies and Private Decisions Affecting the Redevelopment of Brownfields: An Analysis of Critical Factors, Relative Weights and Areal Differentials," 2001, http://www.gwu.edu/~eem/Brownfields/ accessed in November 2013.

Harrison County Assessor Office, http://beacon.schneidercorp.com/, accessed on September 6, 2013.

Missouri Growth Association, "Missouri's Brownfield Tax Credit Program," 2011, http://mogrowth.com/wp-content/uploads/2011/01/Brownfield-Tax-Credit-White-Paper-MGA-2009.pdf accessed in November 2013.

U.S. Conference of Mayors, "Clean Air/Brownfields Report," December 2001. http://usmayors.org/brownfields/CleanAirBrownfields02.pdf accessed in November 2013.

U.S. Environmental Protection Agency, "Water and the Density Debate," Planning Magazine, June 2006. http://www.epa.gov/smartgrowth/pdf/protect_water_higher_density.pdf accessed in November 2013.

Iowa's Redevelopment Tax Credit

Tax Credits Program Evaluation Study

Tables and Figures

Table 1. State Brownfield Tax Credit Programs

State	Name	Enactment Date	Tax Credit	Cap	Refundable	Transferable	Credit Carry Forward
Florida	Voluntary Cleanup Tax Credit	1998	75% of investment for affordable housing or healthcare properties and 50% of investment for other projects	Yes, $500,000 per project per year, $5 million for the program per year	No	Yes	Yes, 5 years
Iowa	Redevelopment Tax Credit	2009	12% of the investment in a grayfield site or 15% if the project meets the green development standards ; 24% of the investment in a brownfield site or 30% if the project meets the green development standards	Yes, $1 million per project per year, $10 million for the program per year	No	Yes	Yes, 5 years
Louisiana	Brownfield Investor Credit	2005	15% of investment for projects investigating contamination or 25% of the investment for site cleanup projects	No	No	Yes	Yes, 10 years
Massachusetts	Brownfield Site Cleanup Credit	1999	25% of investment if the cleaned-up site has an activity and use limitation, 50% of investment if there is no activity and use limitation	No	No	Yes	Yes, 5 years

Table 1 (Continued). State Brownfield Tax Credit Programs

State	Name	Enactment Date	Tax Credit	Cap	Refundable	Transferable	Credit Carry Forward
Missouri	Brownfield Redevelopment Program	2001	100% of the cost of remediating the project property	No	No	Yes	Yes, 20 years
Mississippi	Brownfield Credit	2005	25% of the remediation costs	Yes, $40,000 per project per year and the overall credit for multiple years under an agreement can not exceed $150,000	No	No	Yes, not defined
New York	Brownfield Redevelopment Tax Credit	2005	From 22% to 50% of investment, depending on the level of the cleanup	No	Yes	No	No
South Carolina	Brownfields Voluntary Environmental Clean Up Credit	2002	50% of the qualifying clean up costs and in the final year of cleanup an additional 10% of costs	Yes, $50,000 per project per year	No	No	Yes, 5 years
Tennessee	Brownfield Property Credit	2010	50% of the qualified purchase priceof the project property, unless the taxpayer makes an enhanced capital investment of at least $200,000,000 during the investment period, in which case the credit is 75% of the purchase price	No	No	No	Yes, 15 years

Source: TaxCreditResearch.com, various state revenue department websites

Table 2. Redevelopment Tax Credit Reservations by Fiscal Year

Fiscal Year	Registered Projects	Reserved Tax Credits	Total Qualified Expenses	Average Credit Rate	Uncapped Registered Projects	Uncapped Reserved Tax Credits	Uncapped Qualified Expenses	Average Credit Rate for Uncapped Credits
2010	12	$951,036	$38,615,135	2%	3	$151,036	$1,010,983	15%
2012	21	$4,999,257	$100,532,278	5%	12	$1,499,247	$8,431,147	18%
2013	16	$5,000,000	$61,609,039	8%	10	$2,000,000	$12,041,417	17%
2014	19	$10,000,000	$120,003,408	8%	13	$4,000,000	$67,470,716	6%
Total	68	$20,950,293	$320,759,860	7%	38	$7,650,283	$88,954,263	9%

Note: The tax credit program was not in effect during fiscal year 2011.
Source: Iowa Economic Development Authority

Table 3. Redevelopment Tax Credit Awards by Fiscal Year

Fiscal Year	Number of Awards	Total Awards	Total Qualified Expenses	Average Credit Rate	Uncapped Awards	Uncapped Awards	Uncapped Qualified Expenses	Average Credit Rate for Uncapped Awards
2010	7	$546,510	$5,021,180	11%	3	$146,510	$891,562	16%
2012	4	$928,076	$9,006,130	10%	3	$428,076	$2,488,662	17%
2013	1	$500,000	$13,500,000	4%	0	$0	$0	0%
Total	12	$1,974,586	$27,527,310	7%	6	$574,586	$3,380,224	17%

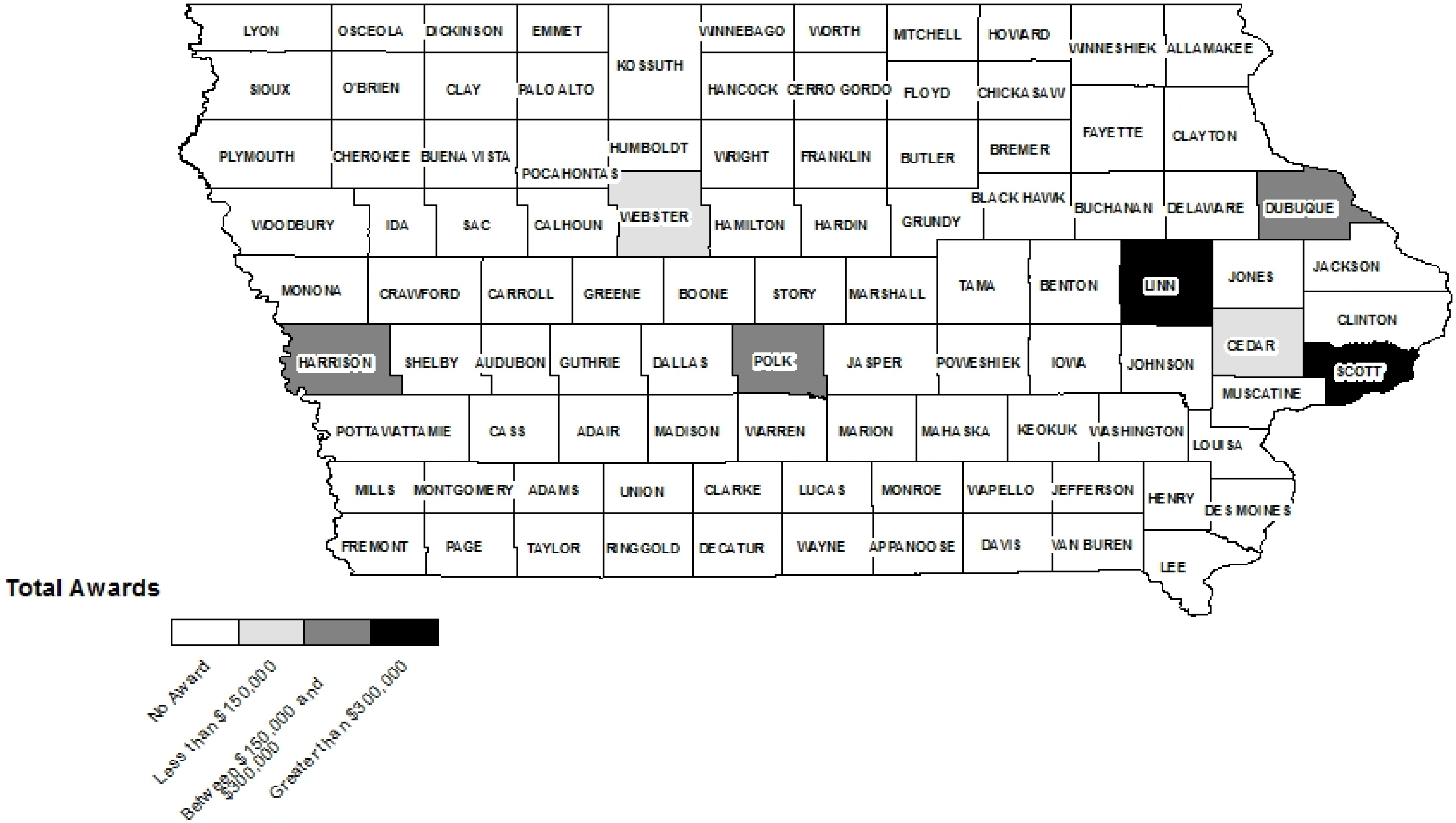
Note: The tax credit program was not in effect during fiscal year 2011.
Source: Iowa Economic Development Authority

Table 4. Redevelopment Tax Credit Awards by Project Type, Fiscal Years 2010-2013

Type	Number of Awards	Total Awards	Average Award
Brownfield	3	$283,036	$94,345
Grayfield	9	$1,691,550	$187,950
Total	12	$1,974,586	$164,549

Source: Iowa Economic Development Authority

Figure 1. Redevelopment Tax Credit Awards by County, Fiscal Years 2010-2013



Source: Iowa Economic Development Authority

Table 5. Redevelopment Tax Credit Transfers by Award Fiscal Year

Award Fiscal Year	Number of Transfers	Total Credits Transferred	Percentage of Total Awards Issued	Percentage of Total Tax Credits Reserved
2010	7	$313,474	57%	33%
2012	4	$918,782	99%	18%
2013	1	$500,000	100%	10%
Total	12	$1,732,256	88%	16%

Source: Iowa Department of Revenue

Table 6. Redevelopment Tax Credit Claims by Tax Year

Tax Year	Number of Claims	Total Claims Applied	Tax Credits Carried Forward	Average Applied Claim
2010	4	$80,505	$81,772	$20,126
2011	16	$390,069	$74,817	$24,379
2012	4	$11,037	$63,287	$2,759
Total	24	$481,611		$20,067

Note: All claims were made on fiscal year 2010 awards.
Source: Iowa Department of Revenue

Table 7. Redevelopment Tax Credit Claims by Project Type, Tax Years 2010-2012

Project Type	Number of Claims	Total Claims Applied	Tax Credits Carried Forward in 2012	Average Applied Claim
Brownfield	11	$269,031	$14,005	$24,457
Grayfield	13	$212,580	$49,282	$16,352
Total	24	$481,611	$63,287	$20,067

Source: Iowa Department of Revenue

Table 8. Redevelopment Tax Credit Claims by Tax Type, Tax Years 2010-2012

Tax Type	Number of Claims	Total Claims Applied	Average Applied Claim
Individual Income Tax	20	$181,611	$9,081
Franchise Tax & Insurance Premium Tax	4	$300,000	$75,000
Total	24	$481,611	$20,067

Source: Iowa Department of Revenue

Table 9. Assessed Property Values Before and After Redevelopment by Project Type

		Assessed Property Value		Average Assessed Property Value		Median Assessed Property Value		Qualified Expenses
	Number of Projects	Before Project (2009/2010)	After Project (2013)	Before Project (2009/2010)	After Project (2013)	Before Project (2009/2010)	After Project (2013)	
All Project Properties	12	$4,814,539	$19,978,714	$437,685	$1,816,247	$67,505	$638,340	$14,027,310
Growth Rate			315.0%		315.0%		845.6%	
Brownfield Properties	3	$3,694,900	$4,852,880	$461,863	$606,610	$310,000	$885,000	$1,711,139
Growth Rate			31.3%		31.3%		185.5%	
Grayfield Properties	9	$1,119,639	$15,125,834	$279,910	$3,781,459	$50,000	$307,200	$12,316,171
Growth Rate			1251.0%		1251.0%		514.4%	

Source: County and City assessors' websites and Iowa Economic Development Authority

Table 10. Assessed Property Values Before and After Redevelopment by Historical Preservation Tax Credit Award

			Assessed Property Value		Average Assessed Property Value		Median Assessed Property Value	
	Number of Projects	Total Awards	Before Project (2009/2010)	After Project (2013)	Before Project (2009/2010)	After Project (2013)	Before Project (2009/2010)	After Project (2013)
All Project Properties	12	$1,974,586	$4,814,539	$19,978,714	$437,685	$1,816,247	$67,505	$638,340
Growth Rate				315.0%		315.0%		845.6%
Properties also Receiving Historical Preservation Tax Credit	6	$768,782	$4,137,093	$7,254,385	$517,137	$906,798	$140,200	$600,600
Growth Rate				75.3%		75.3%		328.4%
Properties without Historical Preservation Tax Credit	6	$1,205,804	$677,446	$12,724,329	$169,362	$3,181,082	$61,805	$638,340
Growth Rate				1778.3%		1778.3%		932.8%

Source: County and City assessors' websites, Iowa Department of Cultural Affairs, and Iowa Economic Development Authority

Table 11. Employment, Total Wages, and Average Wage at Non-Vacant Project Properties

		Employment		Total Wages		Average Wage	
	Number of Projects	Before Project (2010)	After Project (2012)	Before Project (2010)	After Project (2012)	Before Project (2010)	After Project (2012)
All Project Properties	6	49	117	$2,270,471	$4,972,405	$46,336	$42,499
Growth Rate			138.8%		119.0%		-8.3%
Non-Retail Properties	2	49	55	$2,270,471	$2,498,632	$46,336	$45,430
Growth Rate			12.2%		10.0%		-2.0%
Retail Properties	4	0	62	$0	$2,473,773	$0	$39,900

Note: Non-vacant is defined as project properties at which the employment information in 2012 is available in the Iowa Workforce Development Unemployment Insurance Data.

Source: Iowa Workforce Development Unemployment Insurance Data

Table 12. Comparison of Assessed Property Values between Project Properties and Neighboring Properties in Woodbine

	Neighboring Properties (21)		Project Properties (3)	
	Before Project (2009/2010)	After Project (2013)	Before Project (2009/2010)	After Project (2013)
Total Assessed Property Value	$1,413,649	$1,628,417	$58,969	$347,137
Growth Rate		15.2%		488.7%
Median Assessed Property Value	$44,298	$42,470	$18,038	$102,984
Growth Rate		-4.1%		470.9%
Employment	84	82	3	4
Growth Rate		-2.4%		16.7%
Wages	$2,634,422	$2,782,722	$26,521	$31,295
Growth Rate		5.6%		18.0%

Source: Harrison County Assessor Website